

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (previously presented) A guided vehicle for use with another vehicle on an expressway having a lane and a plurality of guidepath indicators extending along the expressway for indicating the path of the lane comprising a vehicle body adapted for travel at highway speeds on the expressway and having a front and a rear, a pair of front wheels pivotably coupled to the body and a pair of rear wheels pivotably coupled to the body for steering the body relative to the expressway, a front steering mechanism coupled to the front wheels for pivoting the front wheels relative to the body and a rear steering mechanism coupled to the rear wheels for pivoting the rear wheels relative to the body, a front sensing unit carried by the front of the body in close proximity to the front wheels for sensing the guidepath indicators as the body travels along the expressway and providing a first signal indicative of the position of the front of the body relative to the guidepath indicators and a rear sensing unit carried by the rear of the body in close proximity to the rear wheels for sensing the guidepath indicators as the body travels along the expressway and providing a second signal indicative of the position of the rear of the body relative to the guidepath indicators, a controller coupled to the front and rear sensing units and the front and rear steering mechanisms for receiving the first and second signals and controlling the pivoting of the front and rear wheels as a function of the first and second signals and a coupling assembly carried by the vehicle body adapted for mechanically coupling the vehicle body to the another vehicle while the vehicle body is traveling at highway speeds on the expressway.

Claim 2. (cancelled)

3. (previously presented) A guided vehicle as in Claim 1 wherein the at least one of the front and rear sensing units includes a video camera mounted on the body for visualizing a plurality of painted lines extending along the expressway.

4. (previously presented) A guided vehicle as in Claim 1 wherein the at least one of the front and rear sensing units includes an antenna for receiving a signal from a plurality of emitters extending along the expressway.

5. (previously presented) A guided vehicle as in Claim 1 wherein the at least one of the front and rear sensing units includes a laser source for receiving a laser light signal from a plurality of reflectors extending along the expressway.

6. (previously presented) A guided vehicle as in Claim 1 wherein the at least one of the front and rear sensing units includes a magnetometer for sensing a plurality of guide magnets extending along the expressway.

7. (original) A guided vehicle as in Claim 1 wherein the rear steering mechanism includes an actuator coupled to the rear wheels.

8. (original) A guided vehicle as in Claim 1 wherein the controller includes a computer.

9. (currently amended) A transportation system for use on a roadway having a lane and a plurality of guidepath indicators extending along the roadway for indicating the path of the lane comprising a lead vehicle and a trailing vehicle adapted for travel at expressway speeds on the roadway, the trailing vehicle having a rear, a coupling mechanism for mechanically coupling the trailing vehicle to the lead vehicle while the trailing vehicle and the lead vehicle are traveling at expressway speeds on the roadway, a pair of wheels pivotably coupled to the rear of the trailing vehicle for steering the trailing vehicle relative to the roadway, a steering mechanism coupled to the wheels for pivoting the wheels relative to the rear of the trailing vehicle, a sensing unit carried by the rear of the trailing vehicle in the vicinity of the wheels for sensing the guidepath indicators as the lead vehicle and the trailing vehicle travel along the roadway and providing a signal indicative of the position of the rear of the trailing vehicle relative to the guidepath indicators and a controller coupled to the sensing unit and the steering mechanism for receiving the signal and controlling the pivoting of the wheels as a function of the signal so as to maintain the trailing vehicle within the confines of the lane.

Claims 10-11. (cancelled)

12. (original) A transportation system as in Claim 9 wherein the coupling mechanism is a coupling mechanism for removably coupling the trailing vehicle to the lead vehicle.

13. (currently amended) A transportation system as in Claim 9 wherein the trailing vehicle includes a motor for powering the trailing ~~the~~ vehicle along the roadway.

Claim 14. (cancelled)

15. (previously presented) A method for operating a vehicle having a pair of front wheels and a pair of rear wheels along a roadway having a lane comprising providing a plurality of guidepath indicators at spaced-apart intervals along the roadway for indicating the path of the lane along the roadway, steering the front wheels of the vehicle to maintain the vehicle within the confines of the lane, providing an electronic sensing unit on the vehicle in the vicinity of the rear wheels to sense each of the guidepath indicators during travel of the vehicle along the roadway and to provide a signal indicative of the relative distance between the vehicle and each of the guidepath indicators, steering the rear wheels in response to the signal to maintain the vehicle within the confines of the lane and coupling the vehicle to another vehicle as the vehicle is traveling at expressway speeds on the roadway.

16. (original) A method as in Claim 15 wherein the guidepath indicators are positioned along the side of the lane.

17. (original) A method as in Claim 16 wherein the guidepath indicators are positioned in the center of the lane.

18. (original) A method as in Claim 16 wherein the guidepath indicators are magnets.

19. (original) A method as in Claim 16 wherein the guidepath indicators are energy emitters.

20. (original) A method as in Claim 16 wherein the guidepath indicators are lines painted on the roadway.

21. (currently amended) A transportation system for use on a roadway having a lane and a plurality of guidepath indicators extending along the roadway for indicating the path of the lane comprising a lead vehicle and a trailing vehicle adapted for travel at expressway speeds on the roadway, the lead vehicle having a front and the trailing vehicle having a rear, a coupling mechanism for mechanically coupling the trailing vehicle to the lead vehicle while the trailing vehicle and the lead vehicle are traveling at expressway speeds on the roadway, a first pair of

wheels pivotably coupled to the front of the lead vehicle for steering the lead vehicle relative to the roadway and a first steering mechanism coupled to the first pair of wheels for pivoting such wheels relative to the front of the lead vehicle, a second pair of wheels pivotably coupled to the rear of the trailing vehicle for steering the trailing vehicle relative to the roadway and a second steering mechanism coupled to the second pair of wheels for pivoting such wheels relative to the rear of the trailing vehicle, a first sensing unit carried by the lead vehicle for sensing the guidepath indicators as the lead vehicle travels along the roadway and providing a first signal indicative of the position of the lead vehicle relative to the guidepath indicators and a second sensing unit carried by the trailing vehicle for sensing the guidepath indicators as the trailing vehicle travels along the roadway and providing a second signal indicative of the position of the trailing vehicle relative to the guidepath indicators and a controller coupled to the first and second sensing units and the first and second steering mechanisms for receiving the first and second signals and controlling the pivoting of the first and second pairs of wheels as a function of the first and second signals so as to maintain the lead vehicle and the trailing vehicle within the confines of the lane.

22. (previously presented) A transportation system as in Claim 21 wherein the coupling mechanism is a coupling mechanism for removably coupling the trailing vehicle to the lead vehicle.

23. (previously presented) A transportation system as in Claim 21 wherein the trailing vehicle includes a motor for powering the trailing the vehicle along the roadway.